

WHAT IS CLAIMED IS:

1. An address setting device for setting an address
of a device in accordance with a control signal, the setting
5 device comprising:

an input terminal for receiving the control signal;

an output terminal for outputting the control signal;

and

a setting circuit, connected to the input terminal and
10 the output terminal, for setting an address value;

the setting circuit setting an initial value and
disconnecting the input and output terminals from each other
when reset; and

when the received control signal includes a
15 predetermined value, the setting circuit changing the
initial value to the predetermined value, which is used as
the address value, and connecting the input and output
terminals to each other.

20 2. The setting device according to claim 1, further
comprising:

a switch connected between the input terminal and the
output terminal, wherein the setting circuit opens the
switch to disconnect the input and output terminals from
25 each other when reset and closes the switch to connect the
input and output terminals to each other when the address
value is set.

3. The setting device according to claim 1, wherein
30 the setting device is one of a plurality of setting devices
connected in series to one another via the input and output
terminals.

4. An actuator for which an address value is set based on a control signal, the actuator comprising:

an input terminal for receiving the control signal;
an output terminal for outputting the control signal;

5 a driving portion; and

a control circuit, connected to the input terminal, the output terminal, and the driving portion, for controlling the driving portion in accordance with the control signal, the control circuit setting its address value in accordance with the control signal;

10 the control circuit setting an initial value and disconnecting the input and output terminals from each other when reset; and

when the received control signal includes a predetermined value, the control circuit changing the initial value to the predetermined value, which is used as the address value of the actuator, and connecting the input and output terminals to each other.

20 5. The actuator according to claim 4, further comprising:

a switch connected between the input terminal and the output terminal, wherein the control circuit opens the switch to disconnect the input and output terminals from each other when reset and closes the switch to connect the input and output terminals to each other when the address value is set.

30 6. The actuator according to claim 5, further comprising:

a control IC on which the control circuit and the switch are integrated.

7. An actuator system comprising:

a plurality of series-connected actuators, wherein an address value is set for each of the actuators; and

a master controller, connected to the actuators, for
5 providing the actuators with a control signal, each of the actuators including:

an input terminal for receiving the control
signal;

10 an output terminal for outputting the control
signal;

a driving portion; and

a control circuit, connected to the input
terminal, the output terminal, and the driving portion,
for controlling the driving portion in accordance with
15 the control signal and for setting the address value of
the actuator in accordance with the control signal;

the control circuit setting an initial value and
disconnecting the input and output terminals from each
other when reset; and

20 when the received control signal includes a
predetermined value, the control circuit changing the
initial value to the predetermined value, which is used
as the address value, and connecting the input and
output terminals to each other.

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8. The actuator system according to claim 7, wherein
each of the actuators further includes:

a switch connected between the input terminal and the
output terminal, wherein the control circuit opens the
30 switch to disconnect the input and output terminals from
each other when reset and closes the switch to connect the
input and output terminals to each other when the address
value is set.

9. The actuator system according to claim 8, wherein
at least one actuator of the plurality is arranged on an air
door in an air conditioner passage of a vehicle, and the
5 driving portion drives the air door.

10. The actuator system according to claim 9, wherein
the control circuit is reset when an ignition switch of a
vehicle is turned off or when the ignition switch is turned
10 on.

11. The actuator system according to claim 10, wherein
the master controller transmits the control signal to set
the predetermined value as the address value after a time
15 required for completing the resetting of the actuators
elapses from when the ignition switch is turned off or on.

12. An actuator system for use in a vehicle air
conditioner having air doors, the actuator system
20 comprising:

a plurality of series-connected actuators, each being
arranged on an air door to drive the air door, wherein an
address value is set for each of the actuators; and

a master controller, connected to the actuators, for
25 providing the actuators with a control signal, each of the
actuators including:

an input terminal for receiving the control
signal;

an output terminal for outputting the control
30 signal;

a driving portion; and

a control circuit, connected to the input
terminal, the output terminal, and the driving portion,

for controlling the driving portion in accordance with the control signal and for setting the address value of the actuator in accordance with the control signal;

5 the control circuit setting an initial value and disconnecting the input and output terminals from each other when reset; and

10 when the received control signal includes a predetermined value, the control circuit changing the initial value to the predetermined value, which is used as the address value, and connecting the input and output terminals to each other.

13. The actuator system according to claim 12, wherein each of the actuators further includes:

15 a switch connected between the input terminal and the output terminal, wherein the control circuit opens the switch to disconnect the input and output terminals from each other when reset and closes the switch to connect the input and output terminals to each other when the address
20 value is set.

14. A method for controlling a plurality of actuators, each including an input terminal and an output terminal, the actuators being connected in series with one another by the
25 input and output terminals, the method comprising:

 setting an initial value for each of the actuators and disconnecting the input and output terminals of each actuator;

30 changing the initial value of each actuator to a predetermined value, which is used as the address value of the actuator, and connecting the input and output terminals to each other.

15. The method according to claim 14, further comprising:

providing all of the actuators, at generally the same time in a state in which the input and output terminals of
5 all of the actuators are connected to each other, with a control signal for controlling the actuators.